

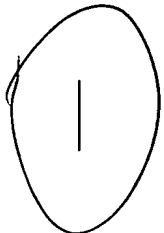
Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A high-voltage pulse generating circuit comprising:
an inductor, a first semiconductor switch, and a second semiconductor switch
which are connected in series between opposite terminals of a DC power supply unit;
a diode having a cathode terminal connected to a terminal of said inductor
which has another terminal connected to an anode terminal of said first semiconductor switch,
and an anode terminal connected to a gate terminal of said first semiconductor switch;
said inductor having a primary winding and a secondary winding; and
a capacitor directly connected to a terminal of the primary winding, and
connected in parallel to said primary winding.



2. (Currently Amended) A high-voltage pulse generating circuit comprising:
an inductor, a first semiconductor switch, and a second semiconductor switch
which are connected in series between opposite terminals of a DC power supply unit;
a resistor connected between a terminal of said inductor which has another
terminal connected to an anode terminal of said first semiconductor switch, and a gate
terminal of said first semiconductor switch;
said inductor having a primary winding and a secondary winding; and
a capacitor directly connected to a terminal of the primary winding, and
connected in parallel to said primary winding.



3. (Previously Presented) A high-voltage pulse generating circuit according to
claim 1, wherein said inductor stores induced energy when said first semiconductor switch is
rendered conductive by said second semiconductor switch which is turned on, and said

inductor generates a high-voltage pulse when said first semiconductor switch is turned off by said second semiconductor switch which is turned off.

4. (Previously Presented) A high-voltage pulse generating circuit according to claim 3, wherein said capacitor forms a path for transferring thereinto a current flowing through said first semiconductor switch after said second semiconductor switch is turned off.

5. (Previously Presented) A high-voltage pulse generating circuit according to claim 1, further comprising:

a diode connected in parallel to said first semiconductor switch and having a cathode terminal connected to said anode terminal of said first semiconductor switch.

6. (Previously Presented) A high-voltage pulse generating circuit according to claim 1, further comprising:

a diode having an anode terminal connected between said DC power supply unit and said second semiconductor switch and a cathode terminal connected to said anode terminal of said first semiconductor switch or said other terminal of said inductor.

7. (Previously Presented) A high-voltage pulse generating circuit according to claim 1, wherein said first semiconductor switch has a static induction thyristor.

8. (Previously Presented) A high-voltage pulse generating circuit according to claim 1, wherein said second semiconductor switch has a power metal-oxide semiconductor field-effect transistor.

9. (Previously Presented) A high-voltage pulse generating circuit according to claim 2, wherein said inductor stores induced energy when said first semiconductor switch is rendered conductive by said second semiconductor switch which is turned on, and said inductor generates a high-voltage pulse when said first semiconductor switch is turned off by said second semiconductor switch which is turned off.

10. (Previously Presented) A high-voltage pulse generating circuit according to claim 9, wherein said capacitor forms a path for transferring thereinto a current flowing through said first semiconductor switch after said second semiconductor switch is turned off.

11. (Previously Presented) A high-voltage pulse generating circuit according to claim 2, further comprising:

a diode connected in parallel to said first semiconductor switch and having a cathode terminal connected to said anode terminal of said first semiconductor switch.

12. (Previously Presented) A high-voltage pulse generating circuit according to claim 2, further comprising:

a diode having an anode terminal connected between said DC power supply unit and said second semiconductor switch and a cathode terminal connected to said anode terminal of said first semiconductor switch or said other terminal of said inductor.

13. (Previously Presented) A high-voltage pulse generating circuit according to claim 2, wherein said first semiconductor switch has a static induction thyristor.

14. (Previously Presented) A high-voltage pulse generating circuit according to claim 2, wherein said second semiconductor switch has a power metal-oxide semiconductor field-effect transistor.